# DOCUMENT MODIFICATION REQUEST (DMR)



Refer to 1 A01-PPG-001 for Processing Instructions
Print or Type All Information (Except Signatures)

| 1 Date | 25 |
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| 24 June 1996 | DMR No 96-DMR-ERM-0031 |

| sting Document Number/Revision | 3 New Document Number or Document Number if it is to be changed with this Revision |
|---|---|
| RF/ER 96-0020 | |

| 4 Originator s Name/Phone/Page/Location | 5 Document Title |
|---|---|
| Stephen Luker, x4455, RMRS QA | Field Sampling Plan for the Source Removal at Trenches T-3 and T-4, IHSSs 110 and 111 1 |

6 Document Type ☐ Procedure ☒ Other FIELD SAMPLING & ANALYSIS PLAN

7 Document Modification Type (Check only one)
☐ New ☐ Revision ☐ Intent Change ☒ Nonintent Change ☐ Editorial Correction ☐ Cancellation

| 8 Item | 9 Page | 10 Step | 11 Proposed Modifications |
|---|---|---|---|
| 1) | 11 of 42 | § 3 2 2 mid ¶ | Replace the sentence beginning with 'During successive batch processing runs ' with As of 20 June 1996 (12 00 hours), a batch' of material will be defined as six (6) sequential loads (~5yd$^3$ each), approximately 30 yds$^3$ in toto, processed through the same oven (e g Oven #1) This definition contrasts with the previous working definition of one batch consisting of oven numbers 1 through 6 (also yielding ~ 30yd$^3$ total) Based on the rationale presented in Appendix 3, a minimum of 1 sample will be taken from each batch Samples should be taken systematically (e g at approximately the third or fourth oven-load per batch) so that the time is minimized between receiving the batch's analytical results and full treatment time (≥3 hrs) of the batch |

12 Justification (Reason for Modification EJO# TP# etc )

The batch-numbering system as currently established does not logically reflect throughput of soil through the thermal desorption system because the 6 ovens within the system do not treat soils at the same rates More importantly for those samples that fail the analytical criteria the associated batches that must be retreated may or may not be related to the faulty process that yielded the failing samples (i e exceeding the action level of 6ppm PCE) As the individual ovens are the primary components of process control any retreatment will now be better associated with the suspected process deficiency and the related soils

This change is NOT a scope change and therefore requires internal review only

If modification is for a new procedure or a revision list concurring disciplines in Block 13 and enter N/A in Blocks 14 and 15 If modification is for any type of change or a cancellation organizations are listed in Block 13 then Concurror prints and signs in Block 14 and dates in Block 15

| 13 Organization | 14 Print and Sign (if applicable) | 15 Date (if applicable) |
|---|---|---|
| | | |
| | SEE ATTACHED FORM FOR SIGNATURES (CONTENT OF THE DOCUMENT MODIFICATION IS THE SAME VERBATIM) | |
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16 Originator Supervis r (print/sign/date)

| 17 Assigned SME/Phone/Page/Location | 18 Cost Center 1392 | 19 Charge Number 95187? QA | 20 Requested Completion Date | 21 Effective Date |
|---|---|---|---|---|
| Accelerated Review Yes ☐ No ☐ | 23 ORC Review NA | | | |

24 Responsible Manager (print sign date)

REVIEWED FOR CLASSIFICATION/UCNI
BY NA
DATE NA

ADMIN RECORD

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# ENVIRONMENTAL MANAGEMENT
# DOCUMENT CHANGE NOTICE (DCN)

cument Number ~~RF/~~ER-96-0020



| Document Title | Date | DCN Number |
|---|---|---|
| Field Sampling Plan for the Source Removal at Trenches T-3 and T-4 IHSSs 110 and 111 1 | 6/19/96 | 96-DMR-ERM-003 |

Expires _____ Procedure Revision Required ☐ Yes ☒ No

Scope Limitation none

| Item Number | Page | Step or Paragraph | Changes (Use DCN CONTINUATION SHEET for additional space) |
|---|---|---|---|
| 1 | 11 of 42 | § 3 2 2, mid ¶ | Replace the sentence beginning with During successive batch processing runs ' with As of 20 June 1996 (12 00 hours) a batch of material will be defined as six (6) sequential loads (~5yd$^3$ each) approximately 30 yds$^3$ in toto processed through the same oven (e g , Oven #1) This definition contrasts with the previous working definition of one batch consisting of oven numbers 1 through 6 (also yielding ~ 30yd$^3$ total) Based on the rationale presented in Appendix 3 a minimum of 1 sample will be taken from each batch Samples should be taken systematically (e g , at approximately the third or fourth oven-load per batch) so that the time is minimized between receiving the batch s analytical results and full treatment time (≥3 hrs) of the batch |

Justification (Reason for change - Provide numbers to reference corresponding items above )

1 The batch-numbering system as currently established does not logically reflect throughput of soil through the thermal desorption system because the 6 ovens within the system do not treat soils at the same rates More importantly, for those samples that fail the analytical criteria the associated batches that must be retreated may or may not be related to the faulty process that yielded the failing samples (i e exceeding the action level of 6ppm PCE) As the individual ovens are the primary components of process control any retreatment will now be better associated with the suspected process deficiency and the related soils

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| Concurrence | Organization | Req | Date | Concurrence | Organization | Req | Date |
|---|---|---|---|---|---|---|---|
| [signature] | QA | X | 6 20 96 | | User | | |
| [signature] | Project Mgr | X | 6 20-96 | | | | |
| [signature] | Peer | X | 6-20-96 | | [signature] | | |
| | | | | | | | |

[signature] Approval of Responsible manager — Date 6-20-96

Is Posting required? ☒ Yes ☐ No

If Yes by what date 6 20 96

Date posted 6-20-96

### 3 2.2 Sampling Frequency After Baseline Conditions are Established

If baseline samples indicate that the treatment process is in control, samples will be collected at a reduced frequency An evaluation of the confidence level associated with the sampling frequency is given in Appendix 3 This reduced frequency is expected to consist of one representative grab sample per batch, contrasted to one sample per oven as required by the initial baselining evaluation The number and types of samples expected to be required are described in Table 3-3 A sample will be collected as a grab from a single oven during each batch processing run As of 20 June 1996 (12 00 hours), a "batch" of material will be defined as six (6) sequential loads (~5yd$^3$ each), approximately 30 yds$^3$ in toto, processed through the same oven (e g , Oven #1) This definition contrasts with the previous working definition of one batch consisting of oven numbers 1 through 6 (also yielding ~ 30yd$^3$ total) Based on the rationale presented in Appendix 3, a minimum of 1 sample will be taken from each batch Samples should be taken systematically (e g , at approximately the third or fourth oven-load per batch) so that the time is minimized between receiving the batch's analytical results and full treatment time (≥3 hrs) of the batch The grab sample will be collected from the center (approximate) of the equipment bucket used to unload the TDU ovens The bucket sampled (sampling position) within the oven will be systematic and representative, in that successive samples will be collected from buckets removing soil from a corner, from a side, and from the center of the ovens All sample locations within the ovens will be noted in the sampling logbook Detrimental anomalies in process controls, feed stock composition, and waste type may require additional sampling to determine any effects that the anomalies may have on VOC concentrations in the treated soil

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# TABLE 3-3 PROCESS VERIFICATION SOIL SAMPLING

| | Process Verification Soil Sampling | | |
|---|---|---|---|
| **Analysis Method** | **Process Verification Samples** | **QC Samples per 20 Batches** | **Container, Preservation, Holding Time** |
| Total VOAs by Appendix 2 Screening Method (on site) | 1 per batch | 1 field duplicate | 4 oz. glass with Teflon liner at 4°C for 14 days |
| Rinsates Blanks by Appendix 2 Screening Method (on-site) | | 1 | 2-40 ml glass vial Teflon lined septa lid, HCl pH<2 4°C for 14 days |
| Total VOAs by SW846 Method 8240/8260 (off site) | | 1 split | 4 oz glass with Teflon liner at 4°C for 14 days |
| Trip Blanks by SW846 Method 8240/8260 (off site) | | 1/cooler for off site VOC samples | 40 ml glass vial Teflon lined septa lid HCl pH<2 4°C for 14 days |
| Radiological Screen (@ Building 881) to support off site sample shipping requirements | | 1 per off site shipment | 40 ml glass vial 6 months<br>Note substitute a 250 ml wide mouth plastic jar when using a Nomad portable gamma spectroscopy system |
| Total Expected Number of samples | 100 regular samples | 5 field duplicates<br>5 rinsates<br>5 splits<br>5 trip blanks<br>5 rad screens | |